Bureau of Overseas Building Operations
U.S. Department of State

PROJECT OVERVIEW
New Consulate Compound in Monterrey, México
April 2012

General Information

- Since the enactment of SECCA in 1999, the Bureau of Overseas Buildings Operations (OBO) has completed the construction of 89 new diplomatic facilities and has moved more than 27,000 individuals into safe, secure and functional facilities.

- The New Consulate Compound (NCC) in Monterrey, Mexico joins the NCC project in Tijuana which was completed in 2011 and the Consulate in Ciudad Juarez, completed in 2008.

- The construction of the NCC in Monterrey reflects the importance of the bilateral relationship between the United States and Mexico, and emphasizes the commitment of the United States to remain engaged with the Mexican people as they strive to build a peaceful, democratic, and prosperous society.

- The multi-building complex will occupy a 10-acre site and when completed will create a secure, state-of-the-art, environmentally sustainable, pleasant workplace for approximately 217 employees.

- The NCC is located approximately 14 km west of downtown Monterrey in the area of Santa Catarina, Nuevo Leon, with a backdrop of the Sierra Madre Mountains.

- The design elements of the NCC serve to compare and contrast the overall character of architectural design in the city of Monterrey and the surrounding region. The Consulate building is designed to be a distinctive landmark in keeping with its important stature.

Design

- The design of the Monterrey NCC focuses on aesthetics and symbolism beyond meeting the functional, technical, and budget requirements of the scope of work.

- The design will create an image of a gateway to the United States that combines an appropriate balance of cordiality and security while representing both Mexican and U.S. cultures.

- The project combines American and local culture and craft, technology, sustainability, security, and constructability to create a shared vocabulary for the design of all the buildings.

- Although the Monterrey NCC uses the Standard Embassy Design (SED) concept as a contract reference, the Request for Proposal drawings have untraditional massing and adjacencies. The Consulate Building design incorporates functions of the SED Utility, Warehouse, and GSO annex buildings.

- The Consulate Building is the principal building on site which consists of a two-story structure housing

the consular services and a five-story structure containing the remaining functions of the consulate office building.

- The two-story structure is to be clad in a native Mexican stone using a traditional laid-up method. The five-story structure is to be covered with a silver metal panel rain screen with the building's base finished in dark grey porcelain tile rain screen.

- The Main Compound Access Control (CAC) and Consular CAC are entrances to the NCC which welcome visitors with glass storefront facades. The Main CAC, Consular CAC, and perimeter walls are primarily stone clad and share the stone palette of the Consulate Building. Ancillary buildings including the Parking Garage and Recreation Building which are utilitarian in design will be finished using a textured cement coating, which relates to the stucco finished masonry traditionally used in Monterrey.

Consular

- The Monterrey NCC has a large consular section. A consular study was conducted early in the design process to determine the optimal configuration of the facility's consular layout. The Non-Immigrant Visa Section is designed to meet the requirement for a peak flow of over 1,500 applicants per day and the American Citizen Services Section to meet a peak flow of over 75 applicants per day. The Consular Section is designed to be a welcoming space for visa applicants and has a total of 52 consular service windows.

- The verdant surroundings, exterior public plazas, and Consular garden are intended to invite visa applicants and official and non-official visitors into the compound and Consulate Building while meeting overflow demands and offering some overhead canopies for protection from the sun.

Interior Design

- The Consulate Building features a multimedia center to enhance outreach and public diplomacy efforts. The multimedia center will provide a modern, inviting venue for press conferences, meetings, and presentations at the Consulate.

- The exterior materials of the building are brought inside at the lobby in addition to the cool grey marble floors and flame-colored Mexican stone. Replicating exterior materials on the interior provides continuity with the entire compound and creates a warm and inviting interior space which reflects the culture of Mexico.

- The grand staircase rises the five-story height of the Consulate Building and is a visual and functional pivot point for the building. The stone-clad stair features glass handrails with ornamental metal and is visible from the exterior through a full height glass panel façade covered by a metal sunscreen.

- Interior public spaces feature marble flooring, fabric-wrapped acoustical panels, stone-clad walls, and solid core wood doors. The neutral architectural background with punches of color sets the tone of the building interior and serves as a backdrop for select furnishings and artwork.

Art

- The Consulate will display a permanent exhibition of contemporary works of art by American, Mexican, and Mexican-American artists for both the interior and exterior spaces.

- The exhibition will include a variety of media: drawings, paintings, photography, textiles, works on paper, mixed-media, sculpture, installation, and video. The works will be selected, and/or commissioned and ultimately acquired by the Department of State's Office of ART in Embassies, with a focus on cross-cultural exchange, highlighting the rich cultural connections between the United States and Mexico.

Safety

- The design of the NCC is shaped by security considerations. The complex will be protected by a perimeter wall with a buffer of landscaped grounds between the wall and the outside of the buildings. These features are standard security aspects of all Department of State new embassy and consulate projects.

Facts

- ✓ Construction Commenced: April 30, 2010
- ✓ Ground Breaking: June 10, 2010
- ✓ Topping-Out Ceremony: February 3, 2012
- ✓ Construction Completion: Fall 2013
- ✓ Total Project Cost: Approximately $165 million
- ✓ Estimated average number of workers who will assist in the construction: 600
- ✓ Project area: 20,303 net square meters of floor area
- ✓ General Construction Contractor: Yates Desbuild Joint Venture (YDJV)
- ✓ Architect of Record: Karn Charuhas Chapman Twohey (KCCT)
- ✓ Cost of the Contract Award: $102 million

Frequently Asked Question

- ❖ Who is responsible for the construction and how long will the project take to complete?

  OBO is responsible for the oversight of the construction of the NCC. Yates Desbuild Joint Venture is the design-build contractor and is responsible for the actual construction of the entire project.

  The entire process from the first notice to proceed to substantial completion will take approximately three years.

SUSTAINABILITY OVERVIEW
New Consulate Compound in Monterrey, México
February 2012

Overview

- The Department of State emphasizes energy efficiency and sustainability when designing New Consulate Compounds (NCC).
- The site's landscaping creates a unified environment for its six separate buildings, demonstrating the U.S. Government's commitment to green design and sustainability as well as excellence in architecture.
- A sustainability study was conducted early in the design and determined that several sustainable features would be beneficial and cost effective.
- Additional sustainability features to be included on the compound are LED task lighting, LED site lighting, Exhaust Energy Recovery, low-flow flush valves and reduced glazing.
- The compound will be targeting Leadership in Energy and Environmental Design (LEED®) certification.
- Strategically located and sculpted on the site, the Consulate is reminiscent of a classically designed building which takes advantage of Monterrey's landscape with panoramic views of the Sierra Madre Mountains.
- The use of entrance and overhead canopies are a repetitive element throughout the compound which tie together the architectural vocabulary of the seven buildings on site together.
- The Department will incorporate the following features into the construction of the NCC in Monterrey, Mexico:

Electrical System:

- 200 KVA solar array situated on top of the Parking Garage

Mechanical Equipment and Systems

- Energy conservation measures incorporated in the NCC include high-efficiency mechanical chillers, energy wheels, high-efficiency condensing boilers, a dedicated heat recovery chiller, premium efficiency motors, variable frequency drives for pumps, fans, and motors, and a building automation system.
- The building automation system allows the facility manager to monitor, control and optimize the mechanical system by viewing systems efficiency and energy consumption, scheduling equipment run-

times, and curtailing systems when they are not required. • The mechanical systems have been designed for energy efficiency and provided with state of the art control systems to minimize energy consumption.

- The mechanical cooling system components have been designed and specified to be free of Chlorofluorocarbon (CFC) refrigerants and to minimize the use of Hydro Chlorofluorocarbon (HFC) refrigerants.

- Air handlers use special three-stage high efficiency HEPA and carbon filter systems to improve the overall indoor air quality and the janitor and copy rooms are equipped with an exhaust system to reduce indoor chemical pollutants.

Energy Efficient Lighting

- Energy efficient lighting will installed to reduce energy demand through occupancy sensors that automatically turn off lights in vacant areas.

- Fixtures adjacent to windows are equipped with automatic daylight dimming illumination to take advantage of sunlight.

- Energy-efficient LED task lighting will be provided at individual workstations.

Building Façade Design

- The Consulate is elongated from north to south, oriented with the longest façades facing east and west to take advantage of the dramatic mountain views of Monterrey's beautiful natural landscape. Sun shading devices will reduce heat gain from these façades and reduce cooling costs.

- Sun shading devices for each individual window are incorporated into the design of the Consulate building and provide horizontal and vertical accents. The Consulate's grand stair and glazed curtain wall incorporate a metal mesh sunshade.

- The building's sun shading devices enhance the overall aesthetics of the building design by introducing light, depth, and shadow to the building façade.

Landscape Design

- The majority of the hard surfaces will be highly reflective surfaces, light gray and cream-colored concrete to reduce the "heat island effect:" the tendency of urban areas with significant amounts of dark colored paving and rooftop surfaces to absorb the sun's radiation, increasing the temperature of the microclimate in those areas by as much as 10-15 F (5.5-8.3 C) degrees.

- To reduce the heat island effect of the walkways and the parking lot, the landscape design will include an abundance of trees to shade these areas. More than half of the site will be covered with vegetation.

- A parking structure will cover over 50% of the parking spaces and further reduce the hardscape development of the site.

- Bicycle racks, showers, and changing facilities will be provided to encourage alternative methods of employee commuting.

Water Conservation

- The storm water management design will limit storm discharge to the pre-development rate via numerous landscaped water quality ponds on-site. Storm water will be collected in a series of drains and pipes, directed to the water quality ponds and then filtered back into the soil, improving the quality of the water and moderating discharge into the city's storm water system.

- To the greatest extent possible, drought-tolerant, indigenous plants requiring limited irrigation will be used.

- To minimize the use of water for irrigation, planting is limited to the most visible areas of the site with the greatest concentration of plants located near pedestrian plazas and walkways.

- In all planting areas, drip irrigation is proposed. In the turf area, the drip tubing will be installed below grade to minimize evaporation. Trees will receive supplemental irrigation with special emitters that direct water directly to the root zone.

- Further water conservation measures will include low-flow bathroom fixtures and automatic shut-off faucets equipped with aerators and flow restrictors.

Construction Materials

- The NCC will be constructed with high quality materials in order to lower life-cycle costs.

- Materials with recycled content have been selected for both structural materials and finishes.

- Building materials will be sourced locally whenever possible to reduce the environmental footprint associated with transportation of the materials.

- The building façade is designed to incorporate stone, metal panels, and porcelain tiles for increased durability and ease of maintenance.

- Superior indoor air quality is achieved by selecting materials with low volatile organic chemical content and installation of an advanced filtration system.

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